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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/830,939	05/03/2001	Toshiki Taru	50212-207	5356

20277 7590 10/07/2002  
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600 13TH STREET, N.W.  
WASHINGTON, DC 20005-3096

EXAMINER

DERRINGTON, JAMES H

ART UNIT	PAPER NUMBER
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1731

DATE MAILED: 10/07/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/830,939

Applicant(s)

TARU ET AL.

Examiner

James Derrington

Art Unit

1731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,5-8,14 and 15 is/are rejected.
- 7) ☒ Claim(s) 3,4 and 9-13 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4,6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

Art Unit: 1731

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2 and 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 09-002832 in view of JP 6-199536 or WO99/51534.

JP 09-002832 discloses a method and apparatus for drawing optical fibers comprising setting an optical fiber preform in a furnace core tube (14) having an upper chamber (24) and drawing the heated preform into an optical fiber wherein the upper portion of the chamber (24) is provided with an auxiliary heater. JP 09-002832 disclose that "on the verge of the completion of the fiber drawing work of the preform ... the temperature ... is lowered". Instant claims 1 and 7 differ in that a cooling means is additionally provided for cooling the upper chamber.

JP 6-199536 disclose a related process and apparatus for drawing optical fibers comprising setting an optical fiber preform in a furnace having a drawing chamber (A) and an upper chamber (B) and drawing the heated preform into an optical fiber wherein the preform is forcedly cooled by gaseous nitrogen supply system 29. It would have been obvious to enhance the temperature lowering step of JP 09-002832 by including a cooling means as disclosed by JP 6-199536.

WO99/51534 disclose a related process where a cooling means lowers the temperature at the upper part of the chamber (See Fig. 7 and par. 0048). It would have been obvious to enhance the temperature lowering step of JP 09-002832 by including a

Art Unit: 1731

cooling means as disclosed by WO99/51534. The rejection over JP 09-002832 in view of WO99/51534 can be obviated by showing support (in the English language) for the rejected claims in applicant's priority documents.

JP 09-002832 does show the steps of measuring and controlling the temperature by means of a sensor and regulator 35.

Claims 5-6 and 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 09-002832 in view of JP 6-199536 or WO99/51534 as applied to claims 1,2 and 7,8 above, and further in view of Kubo et al.

The prior art is replete with the application of external coolants air and water around and/or in walls of chambers for the purpose of cooling. As evidence of this prior art, Kubo et al is cited as disclosing air or water coolants including a circulation system for cooling a glass molding apparatus. Also note the Figs and element 33. It would have been obvious when considering the teachings of the references discussed above and especially the teaching of lowering the temperature as set forth by JP 09-002832 to use art recognized means (water and air) to accomplish the objective of cooling.

Claims 3, 5, 9, 10, and 12 would be allowable if rewritten to include all of the limitations of the base claim and any intervening claims. The cited references do not show or fairly suggest the features cited in these claims.

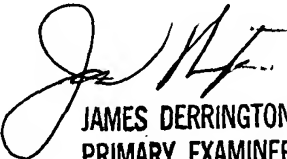
Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Derrington whose telephone number is 703 308-3832. The examiner can normally be reached on 8:30am - 5pm.

Art Unit: 1731

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 703 308-1164. The fax phone numbers for the organization where this application or proceeding is assigned are 703 305-7718 for regular communications and 703 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308 0661.

jd  
September 30, 2002

  
JAMES DERRINGTON  
PRIMARY EXAMINER  
ART UNIT 137-1731